

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. When strikethrough cannot easily be perceived, or when five or fewer characters are deleted, ~~[[double brackets]]~~ are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please RETAIN the claims the claims in their present form in accordance with the following:

1. (Previously presented) An apparatus to determine an area of an optical disc efficiently, comprising:

a pickup that reads/records a signal from/to the optical disc;

a spindle motor that revolves the optical disc; and

a controller that determines whether current time information of the pickup is greater than or equal to 95 minutes,

where current time information is less than or equal to 95 minutes, determines a logical block address of the pickup, and

where current time information is greater than 95 minutes,

counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup,

compares the number of counted ATIP syncs with a reference number of ATIP syncs, and

where the number of ATIP syncs is less than or equal to the reference number of ATIP syncs, determines that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number of ATIP syncs, determines the logical block address of the pickup,

wherein the optical disc has an absolute time of 99 minutes, and

wherein the controller comprises:

a memory that stores a reference number of ATIP syncs for each track of the optical disc;

a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and

a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the logical block address of the pickup to reduce access time.

2. (Original) The apparatus of claim 1, wherein an ATIP sync is output for a block of data that is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

3. (Cancelled)

4. (Canceled)

5. (Previously presented) The apparatus of claim 1, wherein the location determination unit determines that the pickup is present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP syncs.

6. (Previously presented) A method of determining an area of an optical disc efficiently, comprising:

determining whether current time information of the pickup is greater than or equal to 95 minutes, and

where the current time information is less than or equal to 95 minutes,
determining a logical block address of the pickup and

where the current time information is greater than 95 minutes,
counting a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of a pickup;
storing, in a memory, the reference number of ATIP syncs for each track of the optical disc,

counting, by a counter, the number of ATIP syncs for each track at the current position of the pickup, and

comparing, by a location determination unit, the number of counted ATIP syncs with the reference number of ATIP syncs and

where the number of ATIP syncs is less than or equal to the reference number, determining that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determining the logical block address of the pickup to reduce access time.

7. (Original) The method of claim 6, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

8. (Canceled)

9. (Original) The method of claim 6, wherein during the determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP syncs.

10. (Previously presented) A controller to determine a logical block address of a pickup of an optical disc, comprising:

a memory that stores a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

a counter, coupled to the memory, that determines whether current time information of the pickup is greater than or equal to 95 minutes, and

where the current time information is less than or equal to 95 minutes, determines a logical block address of the pickup and

where the current time information is greater than 95 minutes,

counts a number of ATIP syncs for one rotation of the optical disk at a current location of the pickup to provide a counted number of ATIP syncs; and

a location determination unit, coupled to the counter and the memory, that compares the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and

where the number of ATIP syncs is less than or equal to the reference number, determines that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determines the logical block address of the pickup to reduce access time.

11. (Original) The controller of claim 10, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

12. (Canceled)

13. (Original) The controller of claim 10, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP

syncs.

14. (Previously presented) A computer-readable medium having computer-executable instructions stored thereon to determine a logical block address of a pickup of an optical disc efficiently, wherein the computer-executable instructions include:

determining whether current time information of the pickup is greater than or equal to 95 minutes;

where current time information is less than or equal to 95 minutes, determining a logical block address of the pickup; and

where current time information is greater than 95 minutes;

storing a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

counting a number of ATIP syncs for one rotation of the optical disk at a current location of a pickup to provide a counted number of ATIP syncs;

comparing the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and

where the number of ATIP syncs is less than or equal to the reference number, determining that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determining the logical block address of the pickup to reduce access time.

15. (Original) The computer-readable medium of claim 14, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

16. (Canceled)

17. (Original) The computer-readable medium of claim 14, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP syncs.

18. (Previously presented) An apparatus to determine an area of an optical disc efficiently, comprising:

a pickup that reads/records a signal from/to the optical disc; and

a controller that determines whether current time information of the pickup is greater than

or equal to 95 minutes, and

where the current time information is less than or equal to 95 minutes, determines a logical block address of the pickup and

where the current time information is greater than 95 minutes, counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and

where the number of ATIP syncs is less than or equal to the reference number, determines that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determines the logical block address of the pickup to reduce access time,

wherein the optical disc has an absolute time of 99 minutes, and

wherein the controller comprises:

a memory that stores a reference number of ATIP syncs for each track of the optical disc;

a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and

a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the logical block address of the pickup.